

ROTARY HEAT ENGINE

ABSTRACT

The engine consists of an annular array of chambers (hot leg), individually connected to an adjacent continuous condenser (cold leg), and containing a quantity of working fluid and gas – the gas usually being the fluid's own saturated vapor. When a temperature differential exists between the chambers and condenser – either by means of heat being applied to the chambers or cooling being applied to the condenser, or both – a resultant difference in vapor pressure is created; and while fluid within chambers on one lateral side is forced into the condenser, the positioning of the interconnecting ducts allows fluid to run freely from the condenser into chambers on the opposite upper lateral side. The weight imbalance and resultant torque created by such displacement of fluid causes the whole device to rotate, together with the axle to which it is secured.